CONTRIBUTION

TO THE

ICHTHYOLOGY OF AUSTRALIA.

II.—NOTE ON SOME SOUTH AUSTRALIAN FISHES.

I have received from Mr. Waterhouse, the able and indefatigable Curator of the South Australian Museum, a most interesting series of small fishes, collected by himself in the St. Vincent's Gulf, by means of a trawl. A considerable number appear new, and others are only imperfectly known. I intend, in the next volume of the publications of this Society, to give a full account of them, but I think it is only doing justice to Mr. Waterhouse to give here a list of the species, and a short diagnostic of his new discoveries. I just follow the order of his invoices:—

- 1. Hippocampus Breviceps.—Peters.
- 2. Phillopteryx Elongatus.—Cast.

Differs from *Foliatus* by its being of a smaller size; the body much more elongate in both sexes; its foliated appendices much shorter, broader, and of an oval form.

- 3. Syngnathus Pæcilolæmus.—Peters.
- 4. Leptoichthys Fistularius.—Kaup.
- 5. Stigmatophora Argus.—Richard.
- 6. Syngnathus Curtirostris.—Cast.

The snout is contained three times in the length of the head. Of a dark brown colour, with silvery spots on the head and anterior part of the body.

7. Stigmatophora Olivacea. - Cast.

Snout at least twice as long as the remaining part of the head; operculum without a longitudinal ridge; vent below the middle of the dorsal fin; egg-pouch extending over thirteen rings; body rings, nineteen. Entirely of an olive colour.

8. Aploactisoma.—Cast.

This new genus is nearly allied to Richardson's *Aploactis*, but differs from it by the presence of teeth on the palatine bones, and the composition of the fins.

Aplo. Schomburgki.—Cast.

1st D., 5; 2nd D., 8/15. Dark brown, marbled with black; a spot of the last colour at the end of the dorsal.

9. Patæcus Waterhousii.-Cast.

The pectoral fin rather longer than the head, only extending to the anus; dorsal with thirty spines, the first sensibly longer than the others, and with its membrane deeply emarginated; caudal with the fifth, sixth, and seventh rays considerably prolongated; anal with ten rays, the posterior ones being prolongated and pointed; mouth surrounded by several series of bifid papille. Brown, marbled with white.

- 10. Apistes Marmoratus.—Cuv. and Val.
- 11. Glyptauchen Panduratus.—Richard.
- 12. Christiceps Splendens.—Cast.

Upper profile very convex; first dorsal high, of three rays; the second of twenty-eight spines and six rays; the anal has two spines and twenty-three rays. Carmine colour, with the head and fins orange.

13. Chironectes Filamentosus.—Cast.

Comes near *Marmoratus*. On the head, a long, thin, tentaculated spine, having on each side a slender, filiform, bifid tentacle; on the back, there is another long spine, ending, like the other, in a tuberculous knob, and bearing tentacles. **D.**, 13; A., 8. Light brown, with black blotches; lower parts of the body covered with long fleshy appendices.

14. Monacanthus Perulifer.—Cast.

Anal fin with twenty-seven rays; dorsal spine with four series of barbs; the front series much closer together than the posterior series, and formed of small barbs. General appearance of *Granulatus*.

15. Vincentia.—Cast.

General characters of *Chilodipterus*, but no canines; differs from *Pomatomus* by its general high form; its two dorsals are inserted one very near the other; the anterior part of the body is considerably developed; eyes large; two dorsals; the cleft of the mouth oblique; no teeth on the palatine bones, and no spines to the operculum. General appearance of *Apogon*.

Vin. Waterhousii.—Cast.

Reddish colour.

16. Cheilinus Aurantiacus.—Cast.

D. 9/11. A. 3/10. P. 11.

Twenty-three scales on the longitudinal line, and ten on the transverse, three of which are above the lateral line. Of a beautiful orange colour; the dorsal and anal with a broad external black band, and a series of feeble, obscure spots near the body.

- 17. Gerres? Melbournensis .- Cast.
- 18. Odax. Three sorts:—
 - O. Radiatus.—Quoy and Gaim.
 - O. Frenatus.-Gunther.
 - O. Richardsonii.—Gunther.
- 19. Upeneichthys Porosus.—Cuv. and Val.
- 20-22. Heteroscarus.

I propose separating from *Scarus*, under this name, fishes having the upper jaw longer than the other; teeth soldered together, with a median suture in front at the upper jaw; scales large; fourteen or fifteen stiff dorsal spines, the three first prolongated in form of filaments; head naked, porous; cheeks covered with scales, difficult to perceive, and seem-

ingly soldered together; operculum with several rows of large scales; lateral line continuous.

Heteroscarus Filamentosus.—Cast.

The three first dorsal spines prolongated in long filaments. **D.**, 15/11; A., 2/12.

Heteroscarus Modestus.—Cast.

The first dorsal spines less prolongated. D., 14/10; A., 2/11.

21. Platycephalus Inops?—Jenyns.

Accords well with the description, with the exception of the colour of ventrals and anal, which are of a light yellow, covered, like the other fins, with black punctiform spots.

23. Enoplosus Armatus.—White.

All the specimens are of a remarkably bright colour, and the cross-bands extend more on the second dorsal and on the anal than on the Melbourne specimens.

- 24. Diodon Spinosissimus?—Cuv.
- 25. Aracana Ornata.—Gray.

26. Ophiclinus.—Cast.

This new genus is characterised by—Body very elongate; mouth opening upwards; snout having two short filaments; ventral fins inserted in front of the pectorals, being formed of one short and two long filaments; dorsal composed of numerous spines and two rays, which are situated posteriorly; it has no anterior detached portion, and is, as the anal, attached to the caudal; the anal has no spines; lateral line only marked on the extreme anterior part of the body; teeth very numerous, short, very thick, crowded on all the bones of the palate, and also on very numerous rows on the lower jaw.

Ophicl. Antarcticus.—Cast.

Dorsal with sixty-three spines and two rays; anal with thirty-nine rays. Of a brownish red, with the lower parts lighter.

27. Heteroclinus.-Cast.

This new genus is characterised by—Body sub-elongate; mouth opening upwards; snout without tentacles; ventral fins inserted in front of the pectorals, formed of one short and two long filaments; dorsals two, the first of three spines; the second of twenty-eight spines and three rays, placed posteriorly; it is attached to the tail; lateral line only marked on the extreme anterior part of the body; teeth short, blunt, thick; crowded on both jaws, with an external line of more slender and sharper ones; very numerous on all the palatine bones.

Heter. Adelaida,—Cast.

Of a reddish brown, with the lower parts of a yellowish white; an irregular black band on the side.



ERRATA.

- Page 33, line 26, instead of: and as names without meaning, &c., read: and names without meaning, &c.
 - " 37, " 19, instead of: I spent nearly five years in the United States and Canada. I collected a considerable, &c., read: I spent nearly five years in the United States and Canada, I collected, &c.
 - " 40, " 37, instead of: Livington Rooke, read: Lavington Roope.
 - ,, 92, ,, 2, instead of: the new species I propose here, &c., read: the new genus I propose here, &c.
 - " 129, " 16, instead of: sorts of these will, &c., read: sorts of Blennius will certainly, &c.

OBSERVATIONS.

- My genus Neotephræps may be identical with Dr. Gunther's genus Melambaphes.
- Trigla Polyommata is the type of a genus, Hoplonotus, Guichenot, "Ann. de la Société Linnéenne de Maine et Loire," vol. xix.
- I have just received, through the kindness of Mr. George Kissley, a specimen of the Murray Chatessus, and I find it identical with *Erebi*.